

Claims

Claimed is:

1. A combination of a towing vehicle mounting and a vehicle connection
5 member: comprising a generally rectangular channel for telescopically engaging a
complementary rectangular member, whereby said members may be removably
secured together by a locking pin, a trailer featuring a load bearing frame, and a
hitching mechanism for attaching said trailer to said generally rectangular channel,

said trailer comprising a generally horizontally disposed frame having a
10 front member, a rear member and a pair of side members, a pair of at least one
horizontally pivotal wheel assemblies mounted to said frame, where said at least
one wheel assemblies may be pivoted up to about 360 degrees, and a hitching
mechanism secured to said front member, said hitching mechanism comprising a
first generally rectangular channel member fixed to said front member, and a
15 generally rectangular pivotal member mounted at a first end thereof for pivotal
movement in a vertical plane relative to said fixed channel, with a second free end
for telescopically engaging said generally rectangular member on said towing
vehicle.

2. The combination of Claim 1, wherein said vertically pivotal member includes a continuous body portion having a pair of opposing walls extending therefrom, where said side walls include apertures for receiving a pivot pin for engaging complementary apertures in said fixed channel member.

5 3. The combination of Claim 1, wherein each said wheel assembly comprises a U-shaped housing having a base with a pair of parallel walls extending therefrom, said base being pivotally mounted to said frame and said walls rotatably mount a wheel.

10 4. The combination of Claim 1, wherein said generally disposed horizontal frame includes plural intermediate frame members to provide rigidity and flooring support to said trailer.

15 5. The combination of Claim 1, wherein said first generally rectangular member includes a vertically oriented arcuate slot, and said generally rectangular pivotal member is mounted for rotative and vertical movement within said arcuate slot.

6. The combination of Claim 1, wherein at least said first generally rectangular member includes a pair of vertically mounted plate members, where said plate members further include arcuate slots to allow limited vertical movement of said hitching mechanism.

7. The combination of Claim 6, wherein said generally rectangular pivotal member also includes a pair of vertically mounted plate members, also including arcuate slots to facilitate limited vertical movement of said hitching mechanism.
8. The combination of Claim 7, wherein there are a pair of spaced-apart
- 5 hitching mechanisms extending between said towing vehicle and said trailer.

FOOTNOTES

9. A limited nonarticulating trailer and hitch mechanisms for mounting to a towing vehicle having a generally rectangular or tubular (female) channel for telescopically engaging a complementary rectangular or tubular (male) member on said towing vehicle,

5 said trailer comprising a horizontally disposed load bearing frame consisting of at least a front channel member, a rear channel member and a pair of spaced-apart side channel members extending between said front and rear members, a central channel member extending forward from said rear member to beyond said front member and terminating in a free end and forming part of said
10 hitch mechanism, and at least one swivel wheel assembly mounted along said rear channel member, where said at least one wheel assembly are is pivotal about at 360 degrees, and

said hitch mechanism consisting of said free (female) end having a pair of aligned apertures for receiving a pivot pin, and a generally rectangular pivotal
15 member mounted for pivotal movement in a vertical plane about said pivot pin, said generally rectangular pivotal member featuring a rectangular body portion and a pair of opposing wall portions extending from said body portion, where said opposing wall portions are spaced-apart to slidably and rotatably receive and engage said free end, where the opposite end of said body portion is sized to be
20 slidably engaged with said generally rectangular or tubular (male) channel of said towing vehicle.

10. The limited nonarticulating trailer and hitch mechanism of Claim 5 9,
wherein each said wheel assembly comprises a generally U-shaped housing
having a base with a pair of parallel walls extending therefrom, said base being
pivotally mounted to said frame and said walls rotatably mount a said wheel
5 assembly.

11. The limited articulating trailer and hitch mechanism of Claim 9, wherein
said aligned slots are arcuate shaped to allow limited vertical movement of said
trailer traversing uneven terrain.

12. The limited articulating trailer and hitch mechanism of Claim 9, wherein
10 said free end mounts a pair of vertically oriented plates, and said aligned apertures
consist of aligned arcuate slots.